ABSTRACT OF THE DISCLOSURE

An electromechanical cylinder lock includes an outer lock shell and a rotatable lock barrel located therein which is controlled by dual locking features. A side bar or fence selectively blocks and permits rotation of the barrel with respect to the shell in response to insertion of a key into a keyway in the barrel. A slider bar is movable between a blocking position in which the side bar is prevented from permitting rotation of the barrel, and an unblocking position in which the side bar permits rotation of the barrel. Alternately, a blocking mechanism is provided to block motion of tumbler pins in the cylinder lock. A shape memory alloy actuator, such as a wire made of ~~nitinol~~ NITINOL, disposed in the barrel is activated by an electric current in response to determination by an electronic control device whether an attempt to open the lock is authorized. Thermal interlock protection from external heating of the lock is also provided.